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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/680,004 10/05/00 HUTCHISON

M 106923-00017

EXAMINER

MMC2/1102

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ART UNIT

PAPER NUMBER

2875

DATE MAILED:

11/02/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/680,004

Applicant(s)

HUTCHISON, MICHAEL C.

Examiner

Hargobind S Sawhney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. Claims 1-18 are objected to because of the following informalities:

Claim 1, lines 6-9, "inner portion and outer portion" is not clearly recited. The inner portion could be interpreted as the portion inside the housing cavity.

Similarly, the outer portion could be interpreted as the portion outside the housing cavity. Therefore, the limitations "inner portion" and "outer portion" need to be revised to -- central portion -- and -- rim portion -- respectively. Similar deficiencies exist in claims 7,8 and 9.

Claim 17 and 18 recite basically similar limitations; therefore claim 18 has not earned patentable weight.

Claims 2-18 are necessarily objected because of their dependency on the objected base claim 1.

Appropriate correction is required.

This application has been examined considering the limitations "inner portion" and "outer portion" as -- central portion -- and -- rim portion -- respectively.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17, line 2, the phrase "or" renders the claim(s) indefinite because the claim(s) include(s) elements rendering the scope of the claim(s) unascertainable.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3,6-8,13,14,17-19 are rejected under 35 U.S.C. 102(b) as being anticipated Kuo et al. (U.S. Patent No. 6,019,493).

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- Regarding claims 1-3,6-8,13,14,17 and 18, Kuo et al. (U.S. Patent No. 6,019,493) discloses a solid state light apparatus (Figure 1) comprising:
- A housing 1 (Figure 2, column 2, lines 31 and 32) having a cavity, an area of light emitting diodes (LEDs) 21 (Figure 2, column 2, lines 37 and 38) positioned in the housing cavity (Figure 2) and a transparent unitary cover 5 (Figure 2, column 2, lines 50 and 51) coupled to the housing cavity 1, and disposed across the housing cavity 1;
  - The unitary cover 5 further including an integral central portion 51 and a rim portion – flat border area – (Figure 2);
  - The central portion 51 of the cover being convex lens transmitting light from the LEDs;
  - The rim portion – flat border area – extending outwardly from the central lens portion 51;
  - A light diffuser 3 (Figure 2, column 2, lines 41 and 43) positioned closely proximate the LEDs 2;
  - The unitary cover 5 being coupled with seal 12 (Figure 2, column 2, lines 52 and 53);
  - The rim portion of the unitary covers 5 being circular, and including a second lens 53 (Figure 2. Column 2, lines 51-54) separated from the central portion 51;
  - The rim portion further encompassing the central portion of the unitary cover 5;

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- The apparatus being used as a traffic light signal inherently producing light beam complying with DOT requirements;
- The lens cover 5 comprising prisms 52,53 (Figure 2); and
- The lens 51 of the central portion of the unitary cover 5 including a prism 52 (Figure 2) attached to it.

Regarding claim 19, Kuo et al. (U.S. Patent No. 6,019,493) discloses a solid state light apparatus (Figure 1) comprising: a housing 1 accommodating an array of LEDs 21; and a unitary cover coupled to the housing 1 and disposed across the housing cavity. Kuo's teaching of all these features inherently meets the limitation of this method claim.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 4,5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (U.S. Patent No. 6,019,493) in view of Yashuhiko (Japanese Patent No. JP 411261990 A).

Regarding Claims 4 and 5, depending on claim 1, Kuo et al. (U.S. Patent No. 6,019,493) does not teach a solid state light apparatus comprising an electronic detection device comprising a camera positioned in the housing cavity.

On the other hand, Yashuhiko (Japanese Patent No. JP 411261990 A) discloses a traffic monitoring television camera device comprising an electronic detection device 8 (Figure 2) comprising a camera 3a and 3b positioned in the housing cavity 11 (Figure 1).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the solid state light apparatus of Kuo by providing an electronic detection device with camera as taught by Yashuhiko for the benefit and advantage of monitoring and photographing moving vehicles.

Regarding claim 20, dependent on claim 19, Kuo et al. (U.S. Patent No. 6,019,493) in view of Yashuhiko (Japanese Patent No. JP 411261990 A) teaches an electronic detection device 8 (Figure 2) comprising a camera 3a and 3b (Figure 1) positioned in the housing cavity 11 (Figure 1). The teaching of Kuo et al. (U.S. Patent No. 6,019,493) in view of Yashuhiko (Japanese Patent No. JP 411261990 A) of the above indicated features inherently meets the limitation of this method claim.

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8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (U.S. Patent No. 6,019,493).

Kuo et al. (U.S. Patent No. 6,019,493) does not teach the central portion of the unitary cover having a rectangular periphery. Instead, Kuo teaches the periphery of the central lens being circular.

It would have been an obvious matter of design choice to modify the unitary cover with a rectangular periphery. Since the applicant has not disclosed that the rectangular periphery solves any problem or is for a particular reason. It appears that the claimed invention would perform equally well with unitary cover with a rectangular periphery.

9. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (U.S. Patent No. 6,019,493) in view of Hochstein (U.S. Patent No. 5,633,629).

Regarding Claims 10-12, Kuo et al. (U.S. Patent No. 6,019,493) does not teach a solid state light apparatus with a unitary cover comprising either glass or plastic material.

On the other hand, Hochstein discloses a traffic information system 18 (Figure 2, column 2, lines 30 and 31) including a unitary cover 56 (Figure 2, column 4, lines 46-48) with a transparent glass or plastic inherently formed with a molding process.

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the solid state light apparatus of Kuo by providing a unitary



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cover made from either glass or plastic as taught by Hochstein for the benefit and advantage of protecting the device internal from dust and water.

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuo et al. (U.S. Patent No. 6,019,493) in view of McGaffigan (U.S. Patent No. 6,031,958).

Regarding Claims 10-13, Kuo et al. (U.S. Patent No. 6,019,493) does not teach a solid state light apparatus comprising a plurality of LEDs each having a semiconductor die generating a light source generally perpendicular to the respective die.

On the other hand, McGaffigan identifies prior art devices focusing light emitted from the semiconductor die in the direction generally perpendicular to the planer surface of the semiconductor die (Column 16, lines 26-34)

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the solid state light apparatus of Kuo by providing an LED die and it arrangement as taught by McGaffigan for the benefit and advantage of light beam focused in the predetermined direction.

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***Conclusion***

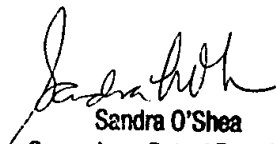
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 703-306-5909. The examiner can normally be reached on 7:30 - 5:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 703-305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-8303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2956.

HSS

October 29, 2001

  
Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800